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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/616,018

07/09/2003

Roland Albert

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1121

31625

7590

06/27/2005

BAKER BOTTS L.L.P.  
PATENT DEPARTMENT  
98 SAN JACINTO BLVD., SUITE 1500  
AUSTIN, TX 78701-4039

EXAMINER

KIM, CHONG HWA

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/616,018

**Applicant(s)**

ALBERT ET AL.

**Examiner**

Chong H. Kim

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/21/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Apr 7, 2005 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitations "a channel" and "the channel" in lines 2 and 3. It is indefinite because it is not clear whether "a channel" is part of the "at least one channel" recited in claim 1 or not, and which channel "the channel" is referring to if there are more than one channel.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Baumel et al., U.S. Patent 5,966,291.

Baumel et al. shows, in Figs. 1 and 2, a plastic control plate comprising at least one channel 23 running through the plastic control plate for carrying a cooling medium, a heat conducting metal body plate 21 having a top surface and a bottom surface, the plate at least partially integrated in the plastic control plate arranged directly adjacent to the channel, wherein the heat conduction metal body plate top surface is flush with a top surface of the plastic plate 2, wherein the heat conduction body is arranged directly adjacent and in contact with the channel whereby a cooling medium running through the channel flows against the body, wherein a flat area of the heat conduction body is designed as a wall area of the channel, wherein the heat conduction body is designed in the form of a U, wherein the inner sides of the U form wall areas of the channel.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loibl et al., U.S. Patent 6,160,708 in view of Baumel et al.

Loibl et al. shows, in Figs. 1-4, an arrangement comprising a plastic control plate and a gearbox control electronics system comprising a plastic control plate 11, a metal heat conduction body 10, a substrate 23 carrying electronic components of the gearbox control electronics system arranged directly on the upper surface of the heat conduction body, wherein the heat conduction body is an aluminum plate, but fails to show at least one channel which runs through the plastic control plate and is used for carrying a cooling medium.

Baumel et al. shows, in Figs. 1 and 2, a plastic control plate comprising at least one channel 23 running through the plastic control plate for carrying a cooling medium, a heat conducting metal body plate 21 having a top surface and a bottom surface, the plate at least partially integrated in the plastic control plate arranged directly adjacent to the channel, wherein the heat conduction metal body plate top surface is flush with a top surface of the plastic plate 2, wherein the heat conduction body is arranged directly adjacent and in contact with the channel whereby a cooling medium running through the channel flows against the body, wherein a flat area of the heat conduction body is designed as a wall area of the channel, wherein the heat conduction body is designed in the form of a U, wherein the inner sides of the U form wall areas of the channel.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the plastic control plate of Loibl et al. with the control plate having a channel for carrying a cooling medium as taught by Baumel et al. in order to provide a

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more effective heat transfer so that the overheating is reduced thus increasing the life expectancy of the control devices as described, in column 1, lines 37-63, by Baumel et al.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baumel et al.

Baumel et al. shows, as discussed above in the rejection of claim 1, the plastic control plate having the heat conduction metal body made of, for example copper, but fails to show the metal body made of aluminum.

Examiner takes Official Notice the fact that aluminum which is well known material in the heat transfer area to be equivalent to copper for use in the heat sink material. To substitute aluminum in Baumel et al. for the disclosed copper material for heat transferring material would have been obvious and would be within the level of ordinary skill in the art.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-5, 7-16, and 18-22 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (571) 272-7108. The examiner can normally be reached on Tuesday - Friday; 7:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Bucci can be reached on (571) 272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

chk  
June 21, 2005



CHONG H. KIM  
PRIMARY EXAMINER